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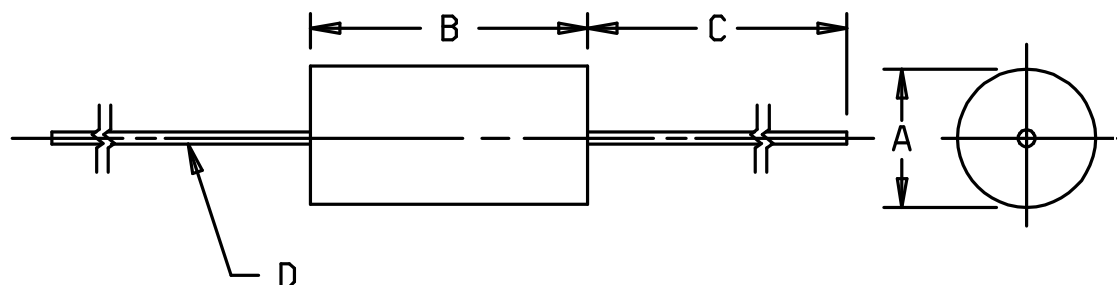
INCH-POUND  
MIL-PRF-39010/2E  
27 August 1997  
SUPERSEDING  
MIL-C-39010/2D  
4 January 1994

## PERFORMANCE SPECIFICATION SHEET

COILS, FIXED, RADIO FREQUENCY, MOLDED, MICROMINIATURE,  
MAGNETICALLY SHIELDED (IRON CORE-IRON SLEEVE),  
ESTABLISHED RELIABILITY AND NONESTABLISHED RELIABILITY

This specification is approved for use by all Departments  
and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this  
specification sheet and MIL-PRF-39010.



Letter	Dimensions are in inches with metric equivalents (mm) in parentheses	
	Minimum	Maximum
A	.152 (3.86)	.172 (4.37)
B	.390 (9.91)	.430 (10.92)
C	1.250 (31.75)	1.626 (41.30)
D	.023 (0.58)	.027 (0.69)

### NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.

FIGURE 1. Dimensions and configuration.

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REQUIREMENTS:

Interface and physical dimensions: See figure 1.

Material: Iron core with iron sleeve.

Weight: 0.04 ounce maximum.

Operating temperature range: -55°C to +105°C.

Dielectric withstanding voltage: Method 301 of MIL-STD-202; test voltage of 1,000 V rms.

Barometric pressure: Method 105 of MIL-STD-202; test condition C, 70,000 feet with a test voltage of 200 V rms.

Electrical characteristics: See table I and table II.

Inductance: See table I.

Inductance tolerance: See table I.

Q values: See table I.

Self-resonant frequency: See table I.

Percent coupling: 3 percent maximum.

DC resistance: See table I.

Temperature rise: 15°C.

Terminal pull: 5 pounds.

Part or Identifying Number (PIN): M39010/02 (dash number from table I).

Supersession data: This specification supersedes MS75088 dated 4 September 1985.

## MIL-PRF-39010/2E

TABLE I. Electrical characteristics (initial) and dash numbers.

Dash number <u>1/</u>	Inductance $\mu$ H	Inductance tolerance $\pm$ percent	Q minimu m	Test frequenc y (MHz)	Self- resonant frequency minimum (MHz)	DC resistance (25°C) maximum (ohms)	Rated dc current (mA) <u>2/</u>
AR91**	.91	5	44	25	140	.07	1,070
A1R0**	1.00	5, 10	44	25	140	.07	1,070
A1R1**	1.10	5	44	7.9	130	.10	895
A1R2**	1.20	5, 10	44	7.9	130	.10	895
A1R3**	1.30	5	44	7.9	115	.12	815
A1R5**	1.50	5, 10	44	7.9	115	.12	815
A1R6**	1.60	5	44	7.9	105	.14	755
A1R8**	1.80	5, 10	44	7.9	105	.14	755
A2R0**	2.00	5	44	7.9	100	.19	650
A2R2**	2.20	5, 10	44	7.9	100	.19	650
A2R4**	2.40	5	44	7.9	92	.28	535
A2R7**	2.70	5, 10	44	7.9	92	.28	535
A3R0**	3.00	5	44	7.9	85	.35	480
A3R3**	3.30	5, 10	44	7.9	85	.35	480
A3R6**	3.60	5	44	7.9	75	.40	450
A3R9**	3.90	5, 10	44	7.9	75	.40	450
A4R3**	4.30	5	44	7.9	70	.55	380
A4R7**	4.70	5, 10	44	7.9	70	.55	380
A5R1**	5.10	5	44	7.9	65	.72	335
A5R6**	5.60	5, 10	44	7.9	65	.72	335
A6R2**	6.20	5	44	7.9	55	1.02	280
A6R8**	6.80	5, 10	50	7.9	55	1.02	280
A7R5**	7.50	5	50	7.9	50	1.32	245
A8R2**	8.20	5, 10	50	7.9	50	1.32	245
A9R1**	9.10	5	50	7.9	46	1.62	220
A100**	10.00	5, 10	50	7.9	46	1.62	220
A110**	11.0	5	50	2.5	44	2.00	200
A120**	12.0	5, 10	50	2.5	44	2.00	200

1/ The complete dash number will include two additional letters (indicated by \*\*). The first additional letter will indicate the inductance tolerance and the second additional letter will indicate the product level (e.g., C, M, P, R, S) and will be added to the end of the dash number.

2/ The rated dc current is based on 90°C ambient temperature with a 15°C rise.

TABLE II. Electrical characteristics (final). 1/

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Inspection group	Allowable variation from initial measurement		Allowable percent from specified minimum value in electrical characteristics (initial) table	
	Inductance (percent)	DC resistance	Self-resonant frequency	Q
Qualification inspection				
Group II	±5			-10
Group IV	±5	±(3% +.001 ohm)	<u>2</u> /	-10
Group V	±5	±(2% +.001 ohm)	<u>2</u> /	-10
Quality conformance inspection Group B				
Subgroup 1	±5	±(2% +.001 ohm)	<u>2</u> /	-10
Subgroup 3	±5			-10
Subgroup 4	±5	±(3% +.001 ohm)	<u>2</u> /	-10

1/ Test fixture allowance of +.01 μH shall be added to all change in inductance limits ±( \_ percent +.01 μH).

2/ The self-resonant frequency shall be not less than the value specified in table I.

Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

## Custodians:

Army - CR  
Navy - EC  
Air Force - 85

## Preparing activity:

Army - CR

## Agent:

DLA - CC

## Review activities:

Army - AR, CR4, MI  
Navy - AS, CG, MC, OS, SH  
Air Force - 17, 19, 99  
DLA - CC

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